# United States Environmental Protection Agency Region V POLLUTION REPORT

EPA Region 5 Records Ctr.

**Date:** Friday, August 21, 2009 **From:** James Augustyn, OSC

To:Jason El-Zein, USEPADavid Chung, OSWERLinda Nachowicz, USEPATracy Johnson, USEPA

Linda Nachowicz, USEPA

Kevin Clouse, Ohio EPA

Mark Durno, USEPA

William Ryczek, USEPA

Tracy Johnson, USEPA

Scott Shane, Ohio EPA

Nola Hicks, USEPA

Joseph Malek, USEPA

Wade Balser, OEPA Mike Dziak, Cleveland Division of Fire

Frank Foley, NEORSD Andrew Kiel, Weston Solutions
Jeff Kelley, USEPA William Messenger, USEPA

Subject: Additional Removal Activities

**DLH Plating Site** 

2801 Grand Avenue, Cleveland, OH

Latitude: 41.4847000 Longitude: -81.6281000

**POLREP No.:** 11 **Site #:** B5NQ **Reporting Period:** 5/29/2009 - 8/21/2009 **D.O. #:** 31

Start Date:11/11/2008Response Authority:CERCLAMob Date:11/11/2008Response Type:Time-CriticalCompletion Date:4/23/2009NPL Status:Non NPL

CERCLIS ID #: OHN 000510286 Incident Category: Removal Action RCRIS ID #: Contract # 68-S5-03-01

## **Site Description**

See POLREP #1 for Site description.

#### **Current Activities**

Following the demolition of the roof and supporting walls of the frontage portion of the building along Evarts Street (former Rooms D, E, F, and L) in April 2009, the concrete slab remained intact and became exposed to rainwater and runoff. Electrochemical plating processes formerly conducted in this portion of the building used cadmium, chromium and cyanide solutions.

On May 29, 2009, the Northeast Ohio Regional Sewer District (NEORSD) observed and sampled a dark-brown liquid on the ground surface south of the Site building and contacted the United States Environmental Protection Agency (U.S. EPA). Analytical results indicated that the liquid contained high levels of cyanide and heavy metal contaminants. U.S. EPA

mobilized its Emergency and Rapid Response Services (ERRS) and Superfund Technical Assessment and Response Team (START) contractors to the Site to perform solidification and removal of the liquid and surrounding soil. During the cleanup activities, U.S. EPA and START observed what appeared to be the same dark-brown liquid on the ground surface between the exposed concrete slab of former Room L and Evarts Street. U.S. EPA and START also observed liquid seeping out of a weep hole in the remaining brick wall leading up to the exposed foundation. U.S. EPA directed START to prepare a quality assurance project plan (QAPP) for sampling of the exposed concrete slab foundation, sub-slab soil, sub-slab water, and surface soil adjacent to Evarts Street to evaluate whether these matrices contain cyanide and heavy metals at concentrations that exceed applicable regulatory limits and may therefore pose a threat or potential threat to human health and the environment.

On July 2, 9, and 10, 2009, U.S. EPA, START, and the Ohio Environmental Protection Agency (Ohio EPA) performed extent of contamination sampling activities at the Site. On July 2, 2009, START used a hammer drill with a carbide bit to collect concrete cores from the exposed foundation of former Room L. START completed one concrete core within the footprint of former Room L. START used a disposable plastic pipette to collect a sample of water on the ground surface between Evarts Street and the exposed foundation of former Room L.

On July 9, and 10, 2009, START used a concrete core drill with a diamond core bit to collect concrete cores from the exposed foundation. START completed 12 concrete cores within the footprint of former Room L and composited the cores into three samples. Ohio EPA used a hydraulically driven, direct-push soil core sampler (GeoProbe7) to collect subsurface soil samples from under the exposed foundation of former Room L. Ohio EPA completed soil borings at each of the 12 concrete core locations to a maximum depth of 11 feet below ground surface (bgs). START collected a grab soil sample using disposable plastic scoops from each of the 4-foot intervals retrieved by OEPA. START used a peristaltic pump to collect a subsurface water sample from under the exposed foundation of former Room L from concrete core/soil boring location L-01. START collected grab surface and nearsurface soil samples from five locations in a grassy area between Evarts Street and the exposed foundation. START collected a grab soil sample using a shovel and disposable scoops from 0 to 6 inches bgs and 6 to 12 inches bgs in all five locations. START collected 5-point composite surface soil samples from three locations in an overgrown area east of Room M to a maximum depth of 6 inches bgs. START collected composite soil samples using a shovel and disposable plastic scoops from 0 to 6 inches bgs in all three locations.

Overall, the sampling results indicated no Site contaminants in the concrete at levels exceeding hazardous waste regulatory levels or the Ohio VAP Standards for commercial/industrial properties; a limited amount of Site contaminants in the on-site soil at levels exceeding the Ohio VAP Standards for commercial/industrial properties; a considerable amount of Site contaminants in the off-site soil (along Evarts Street) at levels exceeding the Ohio VAP Standards for residential properties; and a considerable amount of Site contaminants in the surface and subsurface water at levels exceeding hazardous waste regulatory levels and the Ohio Surface Water Quality Standards. U.S. EPA and START documented that contaminated surface water was migrating from the Site to Evarts Street. In

doing so, the contaminated surface water resulted in the migration of Site contaminants to the soil along Evarts Street at concentrations exceeding the Ohio VAP Standards for residential properties.

On August 17, 2009, U.S. EPA OSC Jim Augustyn, START personnel, and ERRS Response Manager met at the Site to discuss interim remedial measures to prevent contaminated soil and water from migrating off the site onto Evarts Street. The following remedial measures were discussed for the area of exposed concrete slab along Evarts Street (former Rooms D, E, F, and L) that remained intact following the demolition of the roof and supporting walls in April 2009: remove the exposed concrete slab in former Room L, excavate the subsurface soil that exists beneath the slab, grade the area to slope towards the elevation of the existing sidewalk, add a 6 inch layer of clean topsoil in the graded area, and seed the area to stabilize the new site grade. ERRS will also remove a 6 foot wide section of asphalt pavement along the southern side of Evarts Street to the top of the underlying brick and repave the area. ERRS will excavate the soil located between Evarts Street and the sidewalk to a depth of 12 inches below the sidewalk grade, backfill the excavated area with clean topsoil, and seed the area. Finally, ERRS will replaced portions of the sidewalk along the property boundary that have cracked and buckled as a result of site activities. START personnel will provide photographic and written documentation of Site activities and conditions as needed.

On August 18, 2009, ERRS mobilized to the Site and commenced breaking up and removing the exposed concrete slab in former Room L. ERRS placed the removed concrete inside the existing building (Room M). By the end of the work day, all of the concrete slab had been broken up and the western third of the concrete slab had been removed and placed inside the building.

On August 19, 2009, ERRS continued removing the exposed concrete slab in former Room L and staging the concrete inside the existing building. ERRS also removed approximately ¼ of the foundation wall leading up to the concrete slab, near the northeast corner of the Site.

On August 20, 2009, ERRS completed removing and staging the exposed concrete slab in former Room L and began excavating the sub-slab soil. ERRS excavated a 6 foot wide trench in the sub-slab soil to the same elevation as the top of the sidewalk along Evarts Street. Since a storm event was scheduled for later in the day, ERRS elected to leave the remaining portions of the foundation wall in place to prevent stormwater runoff from the excavation to Evarts Street. During excavation operations near the central portion of the excavation, ERRS encountered a 6-inch diameter PVC pipe, which filled a portion of the excavation with liquid that was contained within the pipe. ERRS pumped the liquid from the excavation to a sump inside the building.

On August 21, 2009, ERRS arrived at the Site to find that a severe storm event that occurred the previous night had filled the excavation. ERRS pumped the liquid from the excavation to a sump inside the building. As the liquid was removed from the excavation, ERRS graded the side of the excavation to allow the saturated soil to dry over the upcoming weekend.

#### **Planned Removal Actions**

Continue sub-slab soil excavation under former Room L. Grade, add clean top soil, and seed the excavated area. Remove a 6 foot wide section of asphalt pavement along the southern side of Evarts Street to the top of the underlying brick and repave the area. Excavate the soil located between Evarts Street and the sidewalk to a depth of 6 inches below the sidewalk. Grade, backfill with clean topsoil, and seed the excavated area. Replace portions of the sidewalk along the property boundary that have cracked and buckled as a result of site activities.

## **Next Steps**

The ERRS contractor plans to begin transporting excavated soils off site for disposal on Thursday, August 27th. Street pavement and sidewalk removal and replacement operations will also commence within the next two weeks.

#### **Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs	•			
ERRS - Cleanup Contractor	\$1,082,500.00	\$1,002,886.00	\$79,614.00	7.35%
RST/START	\$116,000.00	\$107,931.00	\$116,000.00	6.96%
Intramural Costs				
Total Site Costs	\$1,198,500.00	\$1,110,817.00	\$87,683.00	7.32%

<sup>\*</sup> The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

### **Disposition of Wastes**

Total to Date:

**Bulk Liquids** 

80,540 gallons of Hazardous Waste Liquids N.O.S. D006, D007 (Chromium, Cadmium) have been transported to Vickery for disposal.

23,750 gallons of Hazardous Waste Liquids D006, D007, F006 (Chromium, Cadmium, Cyanide) have been transported to Vickery for disposal.

20,850 gallons of Waste Chromic Acid Solution D002, D004, D006, D007 have been transported to Vickery for disposal.

18,526 gallons of Waste Corrosive Liquid, Basic, Inorganic N.O.S. have been transported to Vickery for disposal.

#### **Bulk Solids**

375 cubic yards of Hazardous Waste Solid D006, D007, F006, F007 (Chromium, Cadmium) have been transported to Envirite of Ohio, Inc. for disposal.

68 cubic yards of Hazardous Waste Solid D003, D006, F006, F007 (Chromium, Cadmium) have been transported to Envirite of Ohio, Inc. for sampling, laboratory analysis and disposal.

560 cubic yards of RCRA empty containers and debris have been transported to American Landfill for disposal.

648.49 tons of demolition debris have been transported to American Landfill for disposal.

#### Drums

50 gallons of Hazardous Waste Liquids (Cyanides, Chromium) have been transported to Environmental Enterprises, Inc. for disposal.

400 pounds of Hazardous Waste Solids (Metal Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

3,500 pounds of Hazardous Waste Liquids (Sodium Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

750 gallons of Hazardous Waste Liquids (Chromic Acid, Sulfuric Acid) have been transported to Environmental Enterprises, Inc. for disposal.

400 gallons of Hazardous Waste Liquids (Cyanides, Chromium) have been transported to Environmental Enterprises, Inc. for disposal.

2,500 pounds of Hazardous Waste Liquids (Sodium Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

200 gallons of Non-Regulated Material

## Lab Packs

700 pounds of RQ Waste Paint Related Material have been transported to Environmental Enterprises, Inc. for disposal.

300 pounds of RQ Waste Corrosive Liquid, Acid, Inorganic (Sulfuric Acid) have been transported to Environmental Enterprises, Inc. for disposal.

100 pounds of RQ Waste Corrosive Liquid, Basic, Inorganic (Barium Hydroxide) have been transported to Environmental Enterprises, Inc. for disposal.

75 pounds of RQ Waste Flammable Liquids have been transported to Environmental Enterprises, Inc. for disposal.

400 pounds of RQ Waste Toxic Solids, Inorganic (Cadmium) have been transported to Environmental Enterprises, Inc. for disposal.

10 pounds of Waste Oxidizing Solids (Sodium Nitrite) have been transported to Environmental Enterprises, Inc. for disposal.

one (1) pound of RQ Waste Arsenic Trioxide has been transported to Environmental Enterprises, Inc. for disposal.

five (5) pounds of Waste Toxic Solids, Organic have been transported to Environmental Enterprises, Inc. for disposal.

two (2) pounds of RQ Waste Sodium Sulfide have been transported to Environmental Enterprises, Inc. for disposal.

one (1) pound of RQ Waste Meacuaic Nitrate has been transported to Environmental Enterprises, Inc. for disposal.

100 pounds of Waste Stannic Chloride have been transported to Environmental Enterprises, Inc. for disposal.

300 pounds of Waste Ammonium Hydrogen Difluoride have been transported to Environmental Enterprises, Inc. for disposal.

50 pounds of Non-Regulated Material have been transported to Environmental Enterprises, Inc. for disposal.

200 pounds of Waste Toxic Solids, Inorganic (Copper Sulfate) have been transported to Environmental Enterprises, Inc. for disposal.

300 pounds of Waste Corrosive Solids, Basic, Inorganic (Sodium Metabisulfate) have been transported to Environmental Enterprises, Inc. for disposal.

400 pounds of RQ Waste Flammable Liquids (Isopropyl Alcohol) have been transported to Environmental Enterprises, Inc. for disposal.

one (1) pound of radioactive solids (Thorium Nitrate) has been transported to Environmental

Enterprises, Inc. for disposal.

Demolition debris

Approximately 650 tons of demolition debris was transported to American Landfill

Miscellaneous

24 mercury containing items transported to Bowling Green State University for recycling.

www.epaosc.org/DLHPlating